March 15, 2001

PROPOSED AIR TOXICS RULE FOR SEMICONDUCTOR MANUFACTURING

FACT SHEET

TODAY'S ACTION

The Environmental Protection Agency (EPA) is issuing a proposed rule to control the emission of air toxics from the manufacture of semiconductors. Air toxics, also known as hazardous air pollutants (HAP), are those pollutants known or suspected to cause cancer or other serious health problems.

The semiconductor manufacturing industry is a subset of the electronics manufacturing industry, and produces integrated circuits or "chips." Integrated circuits combine the functions of discrete electronic devices in a miniature device that can perform complicated electronic functions in a fraction of a second. The electronics manufacturing industry produces devices such as computers, appliances, radios, CD players, and other finished goods that incorporate these integrated circuits.

Around 30 HAP have been identified in the manufacture of semiconductors. However, we estimate that over 90 percent of all emissions are hydrochloric acid, hydrofluoric acid, glycol ethers, methanol, and xylene.

The rule affects new and existing semiconductor manufacturing facilities. The EPA has identified approximately 170 facilities engaged in the manufacture of semiconductors. We estimate that one of these facilities is a major source of air toxics. The emissions reduction achieved by today's action are minor.

• This rulemaking will propose an emission limitation for process vents. All major sources will be required to reduce emissions from process vents by 98% or to below 20 parts per million volume HAP.

We estimate that there will be no capital costs associated with this proposed rule. We estimate the total annual cost to be about \$22,700 for existing sources.

BACKGROUND

The Clean Air Act requires EPA to regulate emissions of 188 listed toxic air pollutants. For major sources (those with the potential to emit 10 tons annually or more of a listed pollutant or 25 tons or more of a combination of pollutants), the law requires EPA to develop standards requiring the application of stringent air pollution controls. Those standards are known as "MACT standards," because they require the application of maximum achievable control technology, or MACT.

• This notice will propose regulations for the manufacture of semiconductors.

FOR MORE INFORMATION

- To download the rule from EPA's World Wide Web site, to http://www.epa.gov/ttn/oarpg/ramain.html. For more information about today's rule, contact John Schaefer of EPA's Office of Air Quality Planning and Standards at (919) 541-0296.
- EPA's Office of Air and Radiation's web page contains additional information on the air toxics program, as well as many other air pollution programs and issues. The address is http://www.epa.gov/oar.